

Please read and send in as full a
discussion as possible at earliest date.

Canadian Society of Civil Engineers.

INCORPORATED 1887.

ADVANCE PROOF (*Subject to revision.*)

N.B.—This Society, as a body, does not hold itself responsible for
the statements and opinions advanced in any of its publications.

AN UNRECORDED PROPERTY OF CLAY.

(By H. J. CAMBIE, M. Can. Soc. C.E.)

To be read December 4th, 1902.

Some years ago the writer found that ordinary clay, such as used in the manufacture of bricks, and commonly spoken of as plastic clay, would, if dried sufficiently to remove nearly all its moisture, lose its cohesive properties, and would, if water were afterwards applied to it in considerable quantities, become an almost liquid mud. On the other hand, clay which has not been so dried will not absorb any more water, and will lose only some of its outside particles in the washing. The writer has been unable to find any reference to this property of the material in question in the text books at his disposal.

It came to his notice under the following circumstances:—

The main line of the Canadian Pacific Railway runs for nearly 150 miles through a portion of British Columbia, situated between the eastern slope of the Cascade Range, and the western slope of the Gold Range. There is no regular rainfall over this area, and crops cannot be grown without irrigation. A good many thunderstorms do occur in the summer, but only over very limited areas, and the rainfall from them runs away quickly without soaking into the ground to more than a depth of one or two inches, and is dried off